18. (Amended) The apparatus of claim 11 [9], wherein said first applicator and said second applicator are positioned to maintain an article between said first applicator and said second applicator.

Remarks

Claims 3-8, 12, 14, and 16-18 have been amended. Support for the amendments to claims 3 and 6-8 can be found in general throughout the Specification and in particular, for example, as follows: claim 3, page 7, lines 22-27; claims 6 and 7, page 6, lines 29-30; claim 8, page 7, lines 5-13. The amendments to claims 12, 14, and 16-18 were made to correct inadvertent clerical errors and not for reasons related to patentability. The amendments to claims 3 and 6-8 have been made in an effort to further prosecution and not for reasons related to patentability.

Applicants submit that the amendments to claims 3-8, 12, 14, and 16-18 render moot the rejection of claims 3-8, 12, 13, and 16-18 under 35 U.S.C. § 112, second paragraph, and respectfully request that the rejection be withdrawn.

Claims 1-5, 9-16, 18-35 and 57 stand rejected under 35 U.S.C. § 102(b) over Schäfer I (U.S. Patent 5,804,256).

Schäfer I discloses a method of coating printed circuit boards.

Claim 1 is directed to an apparatus for coating an article, where the apparatus includes an applicator, a conveyor for sequentially transporting a plurality of articles to the applicator, and a metering bar positioned against the applicator to meter a predetermined amount of coating composition to the applicator for transfer to an article transported to the applicator by the conveyor (emphasis added). Schäfer I does not teach (1) a metering bar positioned against an applicator. To the contrary, Schäfer I expressly states that there is a gap between the metering roll and the applicator roll. In particular Schäfer I states, "The metering rolls 3,4 form a gap with the smooth rubberized applicator rolls 1,2 defining the desired film thickness" (Schäfer I, col. 4, lines 15-17). Thus, Schäfer I lacks a required element of the apparatus of claim 1, i.e., a metering bar positioned against an applicator. Applicants submit, therefore, that the rejection of claim 1 under 35 U.S.C. § 102(b) over Schäfer I is unwarranted and request that it be withdrawn.

Claims 2-5, 9-16, 18-35 and 57 are distinguishable over Schäfer I for at least the same reasons set forth above in distinguishing claim 1. Applicants submit, therefore, that the rejection of claims 2-5, 9-16, 18-35 and 57 under 35 U.S.C. § 102(b) over Schäfer I is likewise unwarranted and request that it be withdrawn.

Claims 1, 3, 9, 11-13, 16, 18-20, 25-27, 32-35 and 57 stand rejected under 35 U.S.C. § 102(b) over Schäfer II (U.S. Patent 5,863,620).

Schäfer II discloses a process that employs a roll coating apparatus that includes metering rolls (2,4). The metering rolls are so arranged that a "narrow gap" remains between the metering roll (2,4) and the respective applicator roll (1,3).

As stated above, claim 1 is directed to an apparatus for coating an article that includes a metering bar positioned against an applicator. Schäfer II does not teach a metering bar positioned against an applicator. Instead, Schäfer II discloses spacing a metering roll such that a "narrow gap remains between the metering roll 2,4 and the respective applicator roll" (Schäfer II, col. 4, lines 49-52). Thus, Schäfer II lacks a required element of the apparatus of claim 1, i.e., a metering bar positioned against an applicator. Applicants submit, therefore, that the rejection of claim 1 under 35 U.S.C. § 102(b) over Schäfer II is unwarranted and request that it be withdrawn.

Claims 3, 9, 11-13, 16, 18-20, 25-27, 32-35 and 57 are distinguishable over Schäfer II for at least the same reasons set forth above in distinguishing claim 1. Applicants submit, therefore, that the rejection of claims 3, 9, 11-13, 16, 18-20, 25-27, 32-35 and 57 under 35 U.S.C. § 102(b) over Schäfer II is likewise unwarranted and request that it be withdrawn.

Claims 1, 3, 9-16 and 18 stand rejected under 35 U.S.C. § 102(b) over Knain (U.S. Patent 2,868,162).

Knain discloses a machine having endless belts for applying a painted coating to cylindrical articles such as electrical conduit or pipe.

As stated above, claim 1 is directed to an apparatus for coating an article that includes a metering bar positioned against an applicator to meter a predetermined amount of coating composition to the applicator for transfer to an article. Knain does not teach a metering bar positioned against an applicator to meter a predetermined amount of coating composition to the applicator for transfer to an article. The Office action indicates that

element 47 of Knain is a metering bar. Element 47 of the Knain apparatus functions to remove excess paint from the endless belt after the belt has applied the paint to the article to be coated. Element 47 of Knain does not meter a predetermined amount of coating composition to the applicator for transfer to an article. Rather, element 47 entirely removes excess paint from the belt after the belt has applied the paint to the article. In addition, Element 47 removes the excess paint from the "noncoating" areas of the belt. Element 47 does not contact the "working surface of the belt," i.e., the area of the belt that carries the paint to be coated. As Knain explains:

> The paint on the belt naturally tends to move toward the side edges [of the belt and that] . . . additional scraper bars 47 are used to remove any paint that might have been deposited in the undercut portions of the belts. In other words, the side edges of the belts are given under cut extensions which [sic] are used to carry off the excess paint that might build up on the edges. Hence, the working surface of the belt is that part of the belt between the undercut portions 45.

Knain, column 4, lines 52-60. Knain thus fails to teach a required element of the apparatus of claim 1. Applicants submit, therefore, that the rejection of claim 1 under 35 U.S.C. § 102(b) over Knain cannot stand and request that it be withdrawn.

Claims 3, 9-16 and 18 are distinguishable under 35 U.S.C. § 102(b) over Knain for at least the same reasons set forth above in distinguishing claim 1. Applicants request, therefore, that the rejection of claims 3, 9-16 and 18 under 35 U.S.C. § 102(b) over Knain be withdrawn.

Claims 1, 9 and 12 stand rejected under 35 U.S.C. § 102(b) over Schrauwers et al. (U.S. 5,476,545).

Schrauwers et al. disclose a rotary tile glazing and decorating machine.

Claim 1 is directed to an apparatus for coating an article that includes a metering bar positioned against an applicator to meter a predetermined amount of coating composition to the applicator for transfer to an article. The Office action indicates that element 16 of Schrauwers et al. is a metering bar. Element 16, i.e., a doctor blade, of the Schrauwers et al. apparatus "guarantees" the cleanliness of the external surface of the transfer cylinder 5 of the Schrauwers et al. apparatus. Schrauwers et al. explain:

> The cleanliness of the external surface of the transfer cylinder 5 is guaranteed by a doctor 16 which [sic] is kept pressed against the external cylindrical surface and alternates parallel to the rotation axis of the cylinder. Thus the external surface of the transfer cylinder 5 is freed of any residual glaze before coming into contact with the external cylindrical surface of the matrix-bearing cylinder 4 and receiving fresh glaze.

Schrauwers et al., column 2, lines 41-48.

Thus, the doctor blade 16 of Schrauwers et al. does not meter a predetermined amount of coating composition to the applicator for transfer to an article. Rather, the doctor blade 16 of Schrauwers et al. entirely removes excess glaze from the surface of the transfer cylinder and does so after the transfer cylinder has applied the glaze to the tile. Schrauwers et al. thus fails to teach the apparatus of claim 1. Applicants submit, therefore, that the rejection of claim 1 under 35 U.S.C. § 102(b) over Schrauwers et al. is unwarranted and request that it be withdrawn.

The remaining rejections of claims 6-8 and 17 under 35 U.S.C. § 103 over Schäfer I, claim 33 under 35 U.S.C. § 103 over Schäfer I in view of Kirk Othmer, claims 2 and 4-7 under 35 U.S.C. § 103 over Schäfer II, claims 6 and 7 under 35 U.S.C. § 103 over Knain, and claims 2, 3, 6 and 7 under 35 U.S.C. § 103 over Schrauwers et al., are based upon the above-refuted premise that Schäfer I, Schäfer II, Knain or Schrauwers et al. teach a metering bar positioned against an applicator. Since the premise on which the rejections are based has been refuted, the rejections cannot stand. Applicants request, therefore, that the rejections of claims 6-8 and 17 under 35 U.S.C. § 103 over Schäfer I, claim 33 under 35 U.S.C. § 103 over Schäfer I in view of Kirk Othmer, claims 2 and 4-7 stand rejected under 35 U.S.C. § 103 over Schäfer II, claims 6 and 7 under 35 U.S.C. § 103 over Knain, and claims 2, 3, 6 and 7 under 35 U.S.C. § 103 over Schrauwers et al. be withdrawn.

The claims now pending in the application are in condition for allowance and such action is respectfully requested. The Examiner is invited to telephone the undersigned, Allison Johnson at 612-861-8621, if a teleconference interview would facilitate prosecution of this matter.

Please charge any additional fees and credit any over payments to Deposit Account No. 501,171.

Respectfully submitted,

Date: October 7, 2002

Allison Johnson
Reg. No. 36,173

Allison Johnson, P.A.
6016 Logan Ave. S.
Minneapolis, MN 55419
Telephone (612) 861-8621
Facsimile (612) 861-8628

EXHIBIT 2

MARKED-UP VERSION OF THE AMENDED CLAIMS

3.(Amended) The apparatus of claim 1, wherein said applicator is configured to enable the application of [coating apparatus is capable of applying] a substantially uniform layer of coating composition on [a plurality of] articles having different dimensions.

4.(Amended) The apparatus of claim 1 wherein the end of said metering bar positioned against said applicator [roller] has a radius of at least about 2.5 mm.

5. (Amended) The apparatus of claim 1 wherein the end of said metering bar positioned against said applicator [roller] has a radius of at least about 4.0 mm.

6.(Amended) The apparatus of claim 1, wherein said metering bar and said applicator are arranged to enable said metering bar to exert [exerts] a force of at least about 35 g/cm width against said applicator.

7.(Amended) The apparatus of claim 1, wherein said metering bar and said applicator are arranged to enable said metering bar to exert a force of from about 45 g/cm width to about 900 g/cm width against said applicator.

8.(Amended) The apparatus of claim 1, wherein said conveyor and said applicator are configured to enable said applicator to apply a coating to [is positioned relative to said applicator such that said applicator is capable of coating] the edge face of a roll of tape disposed between said [the] conveyor and said applicator.

12.(Amended) The apparatus of claim 11 [9], wherein said first applicator comprises a roller.

14.(Amended) The apparatus of claim 11 [9], wherein said first applicator comprises an endless belt.

16. (Amended) The apparatus of claim 11 [9], wherein said apparatus is capable of substantially simultaneously

a) transferring a coating composition from said first applicator to a first side of an article, and

b) transferring a coating composition from said second applicator to a second side of the article opposite said first side of the article.

17. (Amended) The apparatus of claim 11 [9], wherein the article is a roll of tape and said apparatus is capable of substantially simultaneously

a) transferring a coating composition from said first applicator to a first edge face of a roll of tape, and

b) transferring a coating composition from said second applicator to a second edge face of the roll of tape opposite said first edge face of the roll of tape.

18. (Amended) The apparatus of claim 11 [9], wherein said first applicator and said second applicator are positioned to maintain an article between said first applicator and said second applicator.